18435259

ILLINOIS DOCUMENTS

JUN 07 1988

ILLINOIS STATE LIBRARY

University of Illinois
at Urbana-Champaign

I633.34
UIUC
c.3

A Proposal for a National Soybean Research Laboratory

Examples of soybean varieties

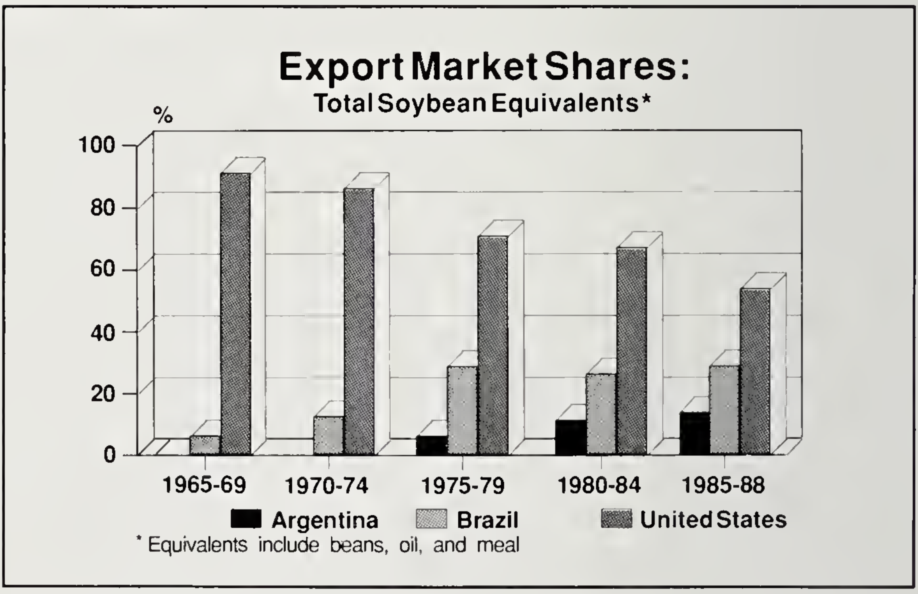
"The future of the soybean industry
is written in genetic code."

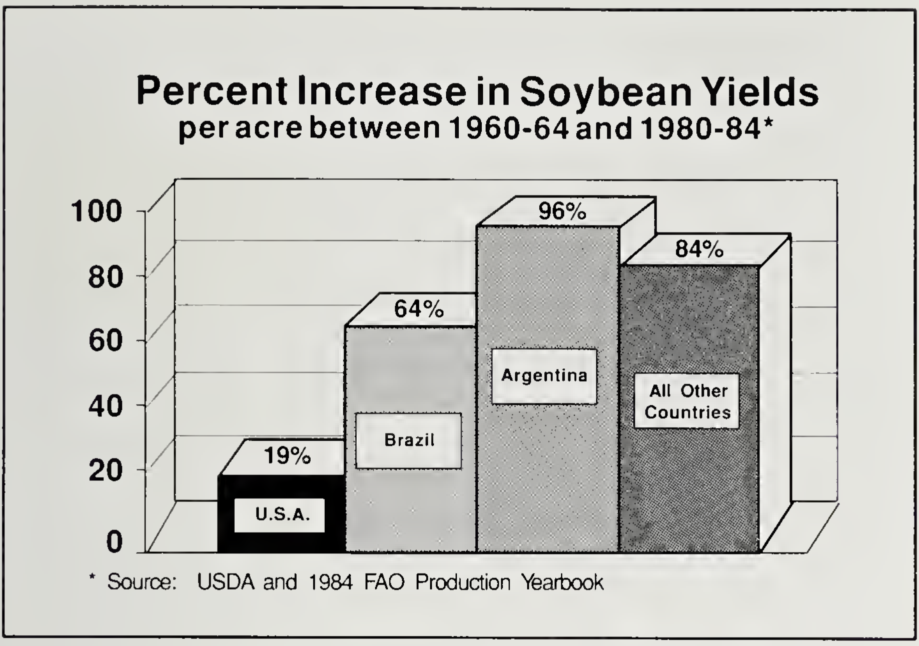
The soybean industry must be prepared to take advantage of changes in the global soybean market. The industry needs a comprehensive program designed to:

- integrate genetic engineering with soybean processing in response to market needs and opportunities
- expand soybean utilization through new uses and new markets.

The National Soybean Research Laboratory will enable an intensive, coordinated effort to integrate genetic engineering with soybean processing and marketing research in order to respond to global market needs and opportunities. Scientists will work closely with the private sector to develop advanced technology to manipulate the physical and chemical nature of soybeans. Researchers will develop new soybean types to meet specific market needs. They will develop new methods for processing soybeans into market-capturing products, and for distributing and marketing the products. This will give the soybean industry a solid base of information and developmental procedures from which to launch competitive initiatives.

The shifting soybean markets emphasize the need to act quickly to recapture and increase market share for the U.S.





Percent Increase in Soybean Yields
per acre between 1960-64 and 1980-84*

* Source: USDA and 1984 FAO Production Yearbook

The proposed National Soybean Research Laboratory will mount and coordinate major national programs to:

- house, maintain and improve the U.S. soybean germplasm and genetic stocks collection
- conduct research to enable genetic modification of the soybean in order to create, penetrate, and maintain commodity and niche markets for U.S. soybeans
- conduct research to hasten development and commercialization of new soybean processing and distribution technology and new marketing and utilization strategies
- conduct research on economic and political issues related to strategic management of U.S. soybean production, marketing, and utilization
- link and coordinate its activities with major soybean organizations, such as the American Soybean Association, with private sector soybean processing and marketing groups, with other public institutions and agencies, with other soybean research, instruction, and extension activities in the midwest and south, and with the USDA and other related national programs.

Why locate the laboratory in Illinois?

Illinois leads all other states and almost all other nations in soybean production, processing, marketing, and research and development. It plants more acres, produces more soybeans per acre, and produces more total soybeans than any other state. In addition, it exports more soybeans than any other state.

The public, through state and federal agencies and institutions, invests almost twice as much in soybean research in Illinois as in any other state. Illinois, working through state and national commodity groups, ranks among the top three states in terms of producer investment in soybean promotion and research.

Examples of extruded soy products

Examples of new soy foods

I633.39
UIUC
c. 3

Why locate at the University of Illinois?

The University of Illinois has a unique combination of characteristics that make it an especially appropriate setting for the National Soybean Research Laboratory:

- The USDA, in cooperation with the University of Illinois, maintains about 80 percent of the national soybean germplasm collection at the University of Illinois. This will be a basic resource for the programs of the National Soybean Research Laboratory.

- The University of Illinois is centrally located in the heart of the major soybean production area of the world.

- More than 100 University of Illinois scientists are directly involved in soybean research.

- The University of Illinois, with over 125 scientists engaged directly in biotechnology research, has a strong, multidisciplinary leadership position in plant and animal biotechnology.

- Located at the University of Illinois is one of the most productive contingents of USDA plant scientists, with outstanding fundamental research programs in photosynthesis; nitrogen fixation and utilization; soybean germplasm and variety improvement; weed, disease and nematode control; and soil-water-air-plant relations.

- The University of Illinois has been extremely effective in competing for biotechnology research funds. The $2 million SOHIO Center of Excellence in Crop Molecular Genetics and Genetic Engineering, for example, was awarded in competition with almost 1000 institutions and agencies. Much of this research is focused on soybeans.

ILLINOIS STATE LIBRARY
3 1129 00479 7460

UNIVERSITY OF ILLINOIS-URBANA
3 0112 122554055

Physical facilities

The University of Illinois proposes to remodel and expand a major building on campus to house the National Soybean Research Laboratory. The proposed structure will provide approximately 40,000 square feet of laboratories, pilot plants, workrooms, meeting rooms, and offices. It will provide ready access to an extensive greenhouse complex and other major facilities housing soybean research.

Budget

Building Costs:

Remodeling	
35,000 sq/ft @ $100 sq/ft	$ 3,500,000
New construction	
5000 sq/ft @ $260 sq/ft	1,300,000
Site work	
(site preparation and utilities extension)	200,000
Total	$ 5,000,000

5 - 88

The University of Illinois is an equal opportunity/affirmative action employer.